

## ABSTRACT OF THE DISCLOSURE

**[0081]** System parameters for contrast agent medical imaging are conveniently set. A simplified contrast agent configuration is provided where an appropriate contrast agent detection technique and/or contrast agent imaging parameters are achieved consistently and more often than exists with current methods. Examination workflow is improved for contrast agent studies by offering one contrast agent imaging mode or configuration that is dynamically determined and optimized based on the user's selected transmit level and/or a real-time measurement of the contrast agent signals. A simplified user interface provides one contrast agent imaging mode without a need to switch between multiple modes or contrast agent detection techniques and associated contrast agent imaging parameters. The contrast agent detection technique and imaging parameters are adjusting or selected based on changes in the transmit levels for contrast agent imaging. Either a single user input control or real time measurements are used to select a transmit level, resulting in automatic selection of adjustment of the detection technique and/or imaging parameters. Appropriate contrast agent detection techniques and imaging parameters are selected for each given transmit level without the user having to switch the mode or configuration of the system during an imaging session. As a result, contrast agent examinations are simplified while minimizing suboptimal selection by a user.